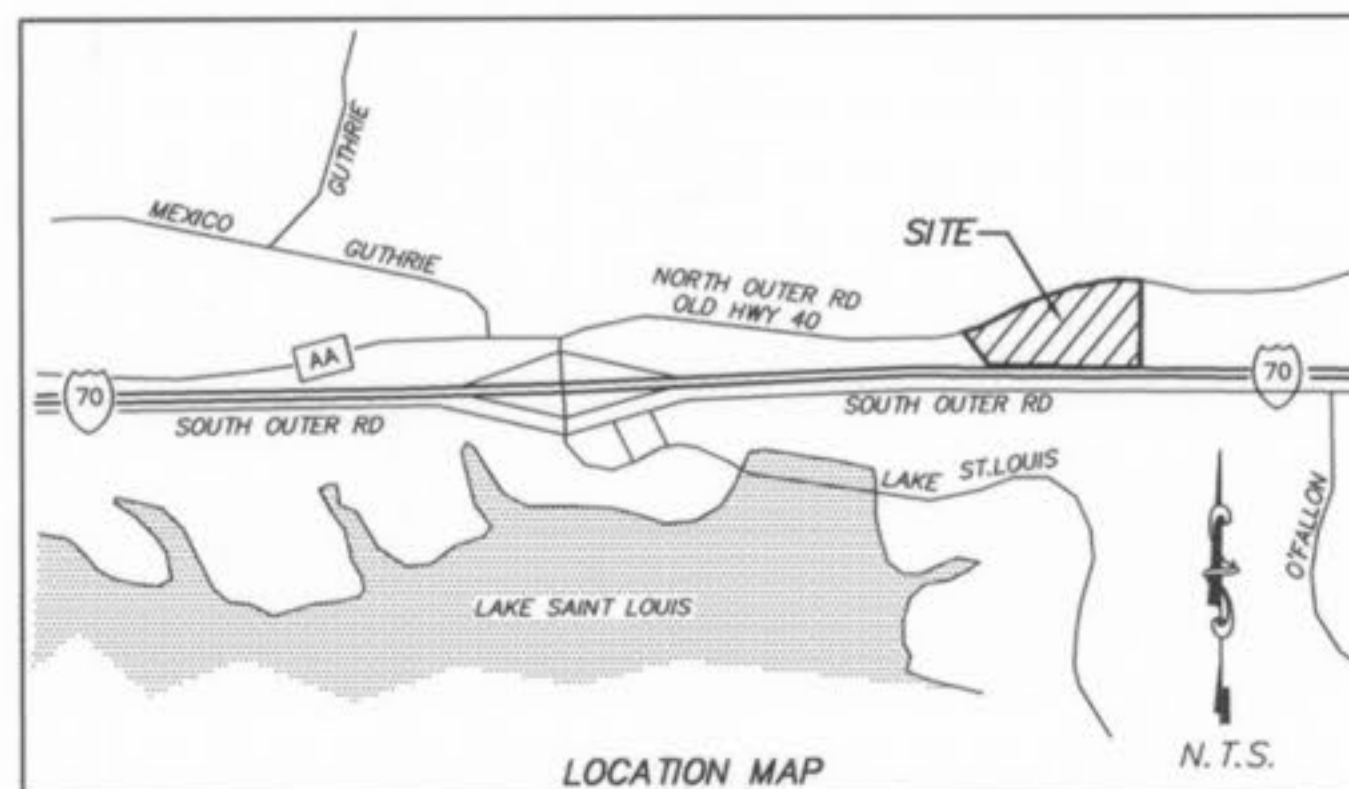


DRI-PORT MARINE IMPROVEMENT PLANS AS-BUILTS

CITY OF O'FALLON GENERAL NOTES

- Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
- Underground utilities have been plotted from available information and, therefore, their locations must be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to grading or construction of improvements.
- Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.
- Storm sewers 18" in diameter or smaller shall be ASTM C-14.
- Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II.
- All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class II) unless noted otherwise in the plans.
- Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-35, A.A.S.H.T.O. See plans for gauge.
- All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.T.O. T-190 Compaction Test" (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a soils engineer.
- All earthen filled places within State, County, or City roads (Highways) shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test A.A.S.H.T.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a soils engineer.
- All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.
- Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plot. See record plot for location and size of easements. This does not apply to house laterals.
- No area shall be cleared without the permission of the developer.
- All grades shall be within 0.2 feet (more or less) of those shown on the grading plan.
- No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
- Hazard markers will consist of three (3) standard specification, "Manual on Uniform Traffic Control Devices," end of roadway markers mounted on two (2) pound "U" channel sign post. Each marker shall consist of an eighteen (18) inch diamond reflectorized red panel. The bottom of each panel shall be mounted a minimum of four (4) feet above the elevation of the pavement surface.
- All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, of curb and grate inlets will be face staked. If normal face stakes fail in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
- All standard street curb inlets to have front of inlet 2 feet behind curb.
- The minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding house connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one-half feet (2-1/2').
- Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority.
- All cast iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A. specification C-111.
- All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
- All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
- All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
- All PVC sanitary sewer pipe shall be DR-35 or equal with crushed stone bedding uniformly graded between 1" and 1/4" size. This bedding shall extend from 6" below the pipe to 12" above the top of the pipe.
- All grading on Missouri State Highway Right-of-Way shall be seeded and mulched and all disturbed Right-of-Way markers shall be reset at the completion of grading.
- All streets must meet the specifications and installation requirements of the City of O'Fallon.
- All sanitary manholes top shall be set 0.2' higher than the proposed ground except in pavement areas.
- All sanitary manholes shall have a 3/16" thick coat of cool tar pitch waterproofing.
- All sanitary service lines shall have a 6" diameter for Multi-family and a 4" diameter for single-family developments.
- Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenah R-1736 or Deeter 1315 or approved equal.
- A drop of 0.2 feet is required through each sanitary manhole.
- The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
- Brick shall not be used on manholes.
- Sewer contractor shall maintain 24" vertical separation between all storm sewers and the sludge force main. Contractor shall be responsible for verifying separation prior to storm sewer installation.
- Waterproofing: Waterproofing will be required on the exterior of all manholes. The bitumen shall consist of two coats of asphalt, coat-tar pitch, or a coating meeting American Society for Testing and Materials (ASTM) D-41. Asphalt shall conform to the requirements of ASTM D 449. Coat-tar pitch shall conform to the requirements of ASTM D-450. Coating shall be 3/16" thickness.
- NOTE: The grading and elevations shown on the grading plans are for construction purposes only. Finished grades and slopes will vary from those shown on the plans depending upon the location, size and type of house built on the lot. However, care should be taken to insure that finished grading conforms to drainage area maps.
- Per F.I.R.M. #29183C0220 E; August 2, 1996, site is located outside the 500-year floodplain.
- Developer must supply City construction inspectors with soil reports prior to or during site soil testing.
- The contractor shall assume complete responsibility for controlling all siltation and erosion of the project area. The contractor shall use whatever means necessary to control erosion and siltation including, but not limited to, staked straw bales and/or siltation fabric fences (possible methods of control are detailed in the plan). Control shall commence with grading and be maintained throughout the project until acceptance of the work by the Owner and/or the City of O'Fallon and/or MoDOT. The contractor's responsibilities include all design and implementation as required to prevent erosion and the depositing of silt. The Owner and/or the City of O'Fallon and/or MoDOT may at their option direct the Contractor in his methods as deemed fit to protect property and improvements. Any depositing of silt or mud on new or existing pavement or in new or existing storm sewers or ditches shall be removed after each rain and affected areas cleaned to the satisfaction of the Owner and/or the City of O'Fallon and/or MoDOT.

LOCATION MAP



40. Lighting values will be reviewed on site prior to the final occupancy inspection. Corrections will need to be made if not in compliance with City standards.

41. This project is served by:
A. City of O'Fallon
B. St. Charles Gas Company
C. G.T.E. Telephone Company
D. O'Fallon Sewer District
E. Union Electric Company
F. O'Fallon Fire Protection District

42. All utilities shall be located underground.

43. NOTE: Sidewalks, curb ramps, ramp and accessible parking spaces shall be constructed in accordance with the current approved "American with Disabilities Act Accessibility Guidelines" (ADAAG) along with the required grades, construction materials, specifications and signage. If any conflict occurs between the above information on the plans, the ADAAG guidelines shall take precedence and the contractor prior to any construction shall notify the Project Engineer.

TO THE CITY OF O'FALLON
These "AS-BUILTS" STORM SEWER & WATER PLANS are based on actual field observations conducted during JANUARY 2004, and the results are shown hereon.

By: *James R. Cheryk* 1-20-04
JAMES R. CHERYK, P.L.S., #2211
STATE OF MISSOURI
PICKETT, RAY & SILVER'S CORPORATE
REGISTRATION NO. LS-54-D

DRAWING INDEX

Sheet	Description
1	COVER SHEET
2	SITE PLAN
3	GRADING PLAN
4	LIGHTING PLAN
5	LANDSCAPING PLAN
6	DRAINAGE AREA MAP
7	SILTATION PLAN
8	DETAIL + PROFILE SHEET
9	DETAIL SHEET
10	ENTRANCE DETAIL

LEGEND

18	Lot or Building Number	(R.C.P.)	Reinforced Concrete Pipe
- x -	Existing Fence Line	(C.M.P.)	Corrugated Metal Pipe
(Tree symbol)	Existing Tree Line	(C.I.P.)	Cast Iron Pipe
(Sign symbol)	Street Sign	(P.V.C.)	Polyvinyl Chloride
(Dashed line)	Existing Contour	(V.C.P.)	Vitrified Clay Pipe
(Solid line)	Proposed Contour	(C.O.)	Clean Out
(Rip-rap symbol)	Grouted Rip-Rap	(V.T.)	Vent Trap
(End of lateral symbol)	End of Lateral	(T.B.R.)	To Be Removed
(Asphalt symbol)	Asphalt Pavement	(T.B.R.&R)	To Be Removed & Relocated
(Concrete symbol)	Concrete Pavement	(T.B.P.)	To Be Protected
(Sanitary sewer symbol)	Sanitary Sewer (Proposed)	(T.B.A.)	To Be Abandoned
(Sanitary sewer symbol)	Sanitary Sewer (Existing)	(B.C.)	Base Of Curb
(Storm sewer symbol)	Storm Sewer (Proposed)	(T.C.)	Top Of Curb
(Storm sewer symbol)	Storm Sewer (Existing)	(T.W.)	Top Of Wall
(Water line symbol)	Water Line & Size	(B.W.)	Base Of Wall
(Existing water line symbol)	Existing water line	(TYP)	Typical
(Tee & Valve symbol)	Tee & Valve	(U.N.O.)	Unless Noted Otherwise
(Hydrant symbol)	Hydrant	(U.L.P.)	Use In Place
(Cap symbol)	Cap		
(Sanitary structure symbol)	Sanitary Structure		
(Storm structure symbol)	Storm Structure		
(Test hole symbol)	Test Hole		
(Power pole symbol)	Power Pole		
(Light standard symbol)	Light Standard		
(Double water meter setting symbol)	Double Water Meter Setting		
(Single water meter setting symbol)	Single Water Meter Setting		
(Curb inlet symbol)	Curb Inlet		
(Skewed curb inlet symbol)	Skewed Curb Inlet		
(Double curb inlet symbol)	Double Curb Inlet		
(Grate inlet symbol)	Grate Inlet		
(Area inlet symbol)	Area Inlet		
(Double area inlet symbol)	Double Area Inlet		
(Concrete collar symbol)	Concrete Collar		
(Flared end section symbol)	Flared End Section		
(End pipe symbol)	End Pipe		
(Energy dissipator symbol)	Energy Dissipator		
(Manhole symbol)	Manhole		
(Concrete pipe symbol)	Concrete Pipe		

BENCHMARKS

BM1: Top railroad rail near the northwest corner of this site
ELEVATION = 504.35

BM2: Top Iron Pipe with Box cap at the southeast corner of this site.
ELEVATION = 565.65

PICKETT RAY & SILVER

Civil Engineers
Planners
Land Surveyors

333 Mid Rivers Mall Dr.
St. Peters, MO 63376
397-1211 FAX 397-1104

CITY FILE # 19900

PICKETT RAY & SILVER
CIVIL ENGINEERS
PLANNERS
LAND SURVEYORS
333 Mid Rivers Mall Drive
St. Peters, MO 63376
Phone (636) 397-1211
Fax (636) 397-1104

**DRI-PORT MARINE
COVER SHEET**
O'FALLON, MISSOURI

1500 S. OUTER ROAD
BURLEAKA, MO 63025
(636) 934-4970

Prepared For:
MR. GREG MAZE

REV. NO.	DATE	PER CITY COMMENTS
1	06/19/02	PER CITY COMMENTS
2	08/23/02	PER CITY COMMENTS
3	10/09/02	PER CITY COMMENTS
4	10/17/02	PER CITY COMMENTS
	07/12/04	AS-BUILTS

ENGINEERS AUTHENTICATION
The responsibility for professional engineering liability on this project is hereby limited to the set of plans authorized by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthorized.

PICKETT, RAY & SILVER, INC

DRAWN	J.M.W.	DATE	02.25.02
CHECKED	D.W.B.	DATE	02.25.02
PROJECT #	00214.DRPO.02C	TASK #	1
FIELD BOOK			

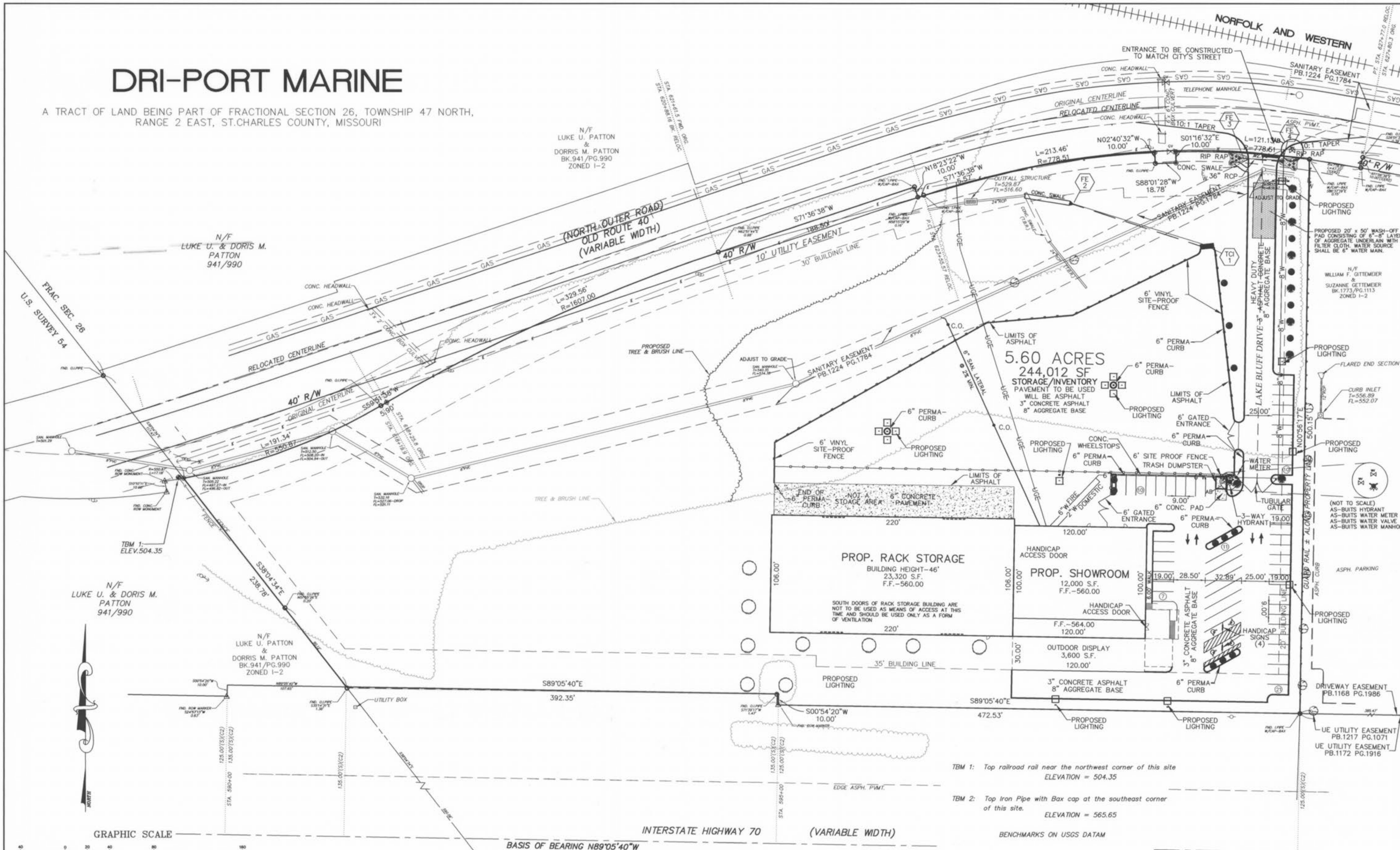
**DRI-PORT MARINE
COVER SHEET**
SHEET 1 OF 10
© Copyright 2002 by Pickett, Ray & Silver Inc.

DRI-PORT MARINE AS-BUILT

PROJECTS\00214ASBUILT.DWG 01-12-04

DRI-PORT MARINE

A TRACT OF LAND BEING PART OF FRACTIONAL SECTION 26, TOWNSHIP 47 NORTH, RANGE 2 EAST, ST. CHARLES COUNTY, MISSOURI



PICKETT RAY & SILVER
 CIVIL ENGINEERS
 PLANNERS
 LAND SURVEYORS
 333 Mid Rivers Mall Drive
 St. Peters, MO 63376
 Phone (636) 397-1211
 Fax (636) 397-1104

DRI-PORT MARINE
 SITE PLAN
 OF FALLON, MISSOURI
 Prepared For:
MR. GREG MAZE
 1500 S. OUTER ROAD
 EUREKA, MO 63025
 (636) 938-4970

REVISIONS NO.	DATE	PER CITY COMMENTS	PER CITY COMMENTS	PER CITY COMMENTS	PER CITY COMMENTS
1	06/19/02				
2	08/23/02				
3	10/09/02				
4	10/11/02				
	01/12/04				

ENGINEERS AUTHENTICATION
 The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
PICKETT, RAY & SILVER, INC.

DRAWN	J.M.W.	DATE	02.25.02
CHECKED	D.W.B.	DATE	02.25.02
PROJECT	00214.DRPO.02C		
TASK #	1	FIELD BOOK	

DRI-PORT MARINE
 SITE PLAN
 SHEET 2 OF 10
 © Copyright 2002 by Pickett, Ray & Silver Inc.

CITY FILE # 19900

NOTE
 Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

- CITY OF O'FALLON GENERAL NOTES**
- Present Zoning: I-1, LIGHT INDUSTRIAL
 - Proposed Use: Boat Sales & Repair/Storage/Office
 - Area of Tract: 8.67 Acres
 - Site is not located within the 100 year flood plain per FIRM Map #29183C0220 E
 - Project is Served By:
 A. City of O'Fallon
 B. St. Charles Gas Company
 C. G.T.E. Telephone Company
 D. O'Fallon Sewer District
 E. Union Electric Company
 F. O'Fallon Fire Protection District
 - All utilities shall be located underground.
 - Parking and building shall be in compliance with A.D.A. Accessibility Guidelines.
 - Storm water detention will be provided for on site.
 - Building height, site lighting and signage shall be in accordance with City of O'Fallon requirements.
 - Lighting shall be directed down and shielded so as not to overflow onto adjacent properties or streets.
 - Setback and yard requirements:
 Front - 30 feet
 Side - 20 feet
 Rear - 35 feet
 - Grading and drainage shall be per City of O'Fallon requirements.
 - Site shall comply with Article 26 of the O'Fallon Zoning Ordinance.
 - Lighting details shall be provided by Developer at time of the submittal of construction drawings.

- Trash enclosure shall follow newly adopted city ordinance on screening materials.
- Exact location of proposed water & sewer lines shall be determined on final construction plans.
- A landscape plan in accordance with City of O'Fallon's Zoning Code and Tree Preservation Ordinance requirements shall be provided with the final construction plans.
- There are no billboards located on this site.

SITE COVERAGE			
BUILDINGS	PAVED AREAS	GREEN SPACE AREAS	TOTAL SQ. FT.
39,872 (10.0%)	93,292 (25.0%)	244,501.2 (65.0%)	377,665.2 SQ. FT.(8.67AC.)

PARKING CALCULATIONS:
 Required Parking: 1 Space for every 3000 sq.ft. of storage and sales
 1 Space for every employee
 Total sq.ft. = 85,570 sq.ft.
 (23,320 SF) Used for indoor rack storage
 (12,000 SF) Used for indoor showroom/storage
 (50,250 SF) Used for outdoor boat storage
 Total employees=5
 34 Parking Spaces Required
 59 Parking Spaces Provided

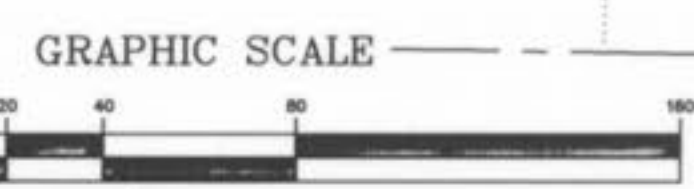
- TREE SCHEDULE -**
- 9 RED SUNSET MAPLE Acer rubrum 'Red Sunset' 3" Caliper 8'-9'
 - 8 AUSTRALIAN PINE Pinus nigra 6'-7'
 - 18 WHITE PINE Pinus strobus

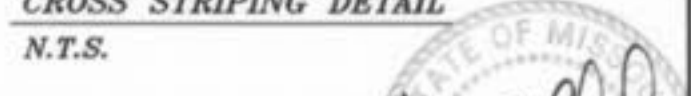
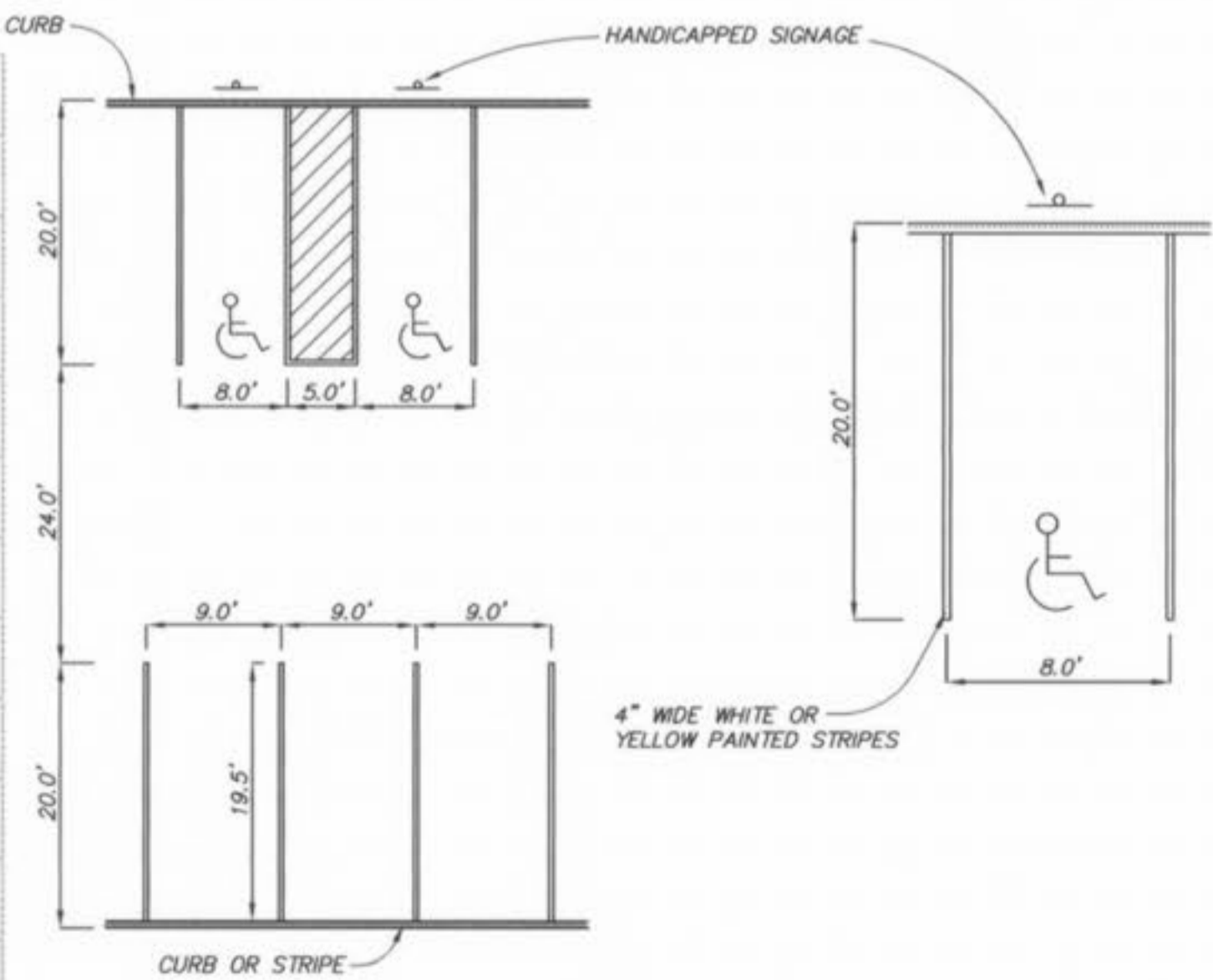
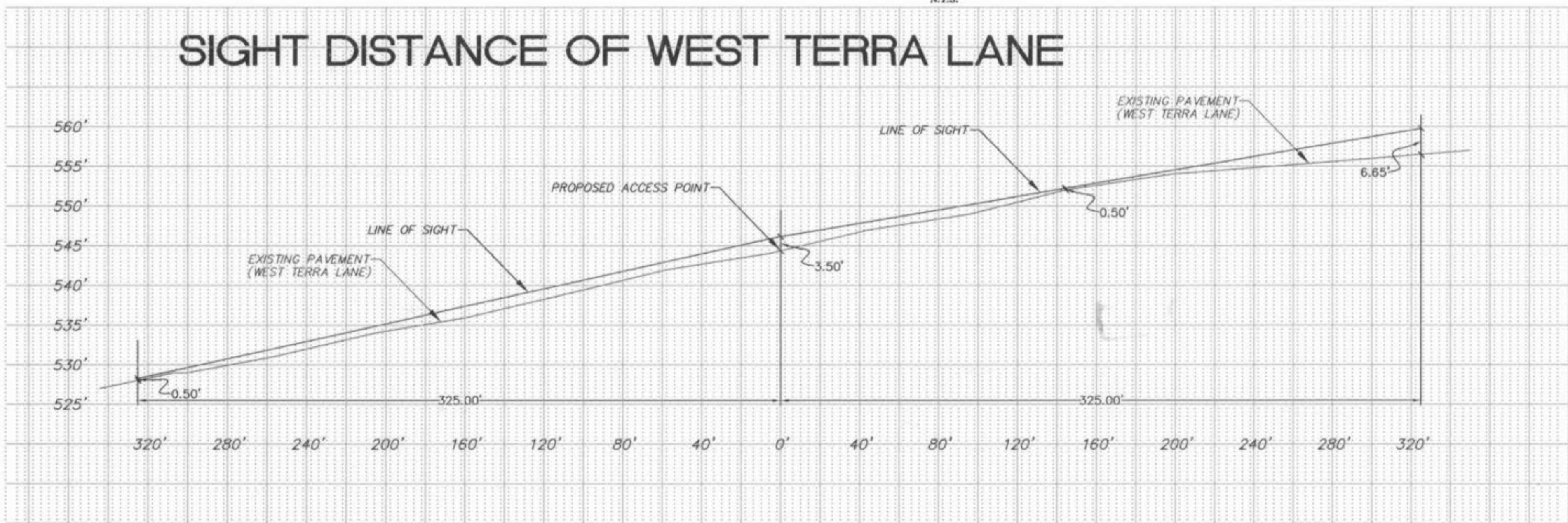
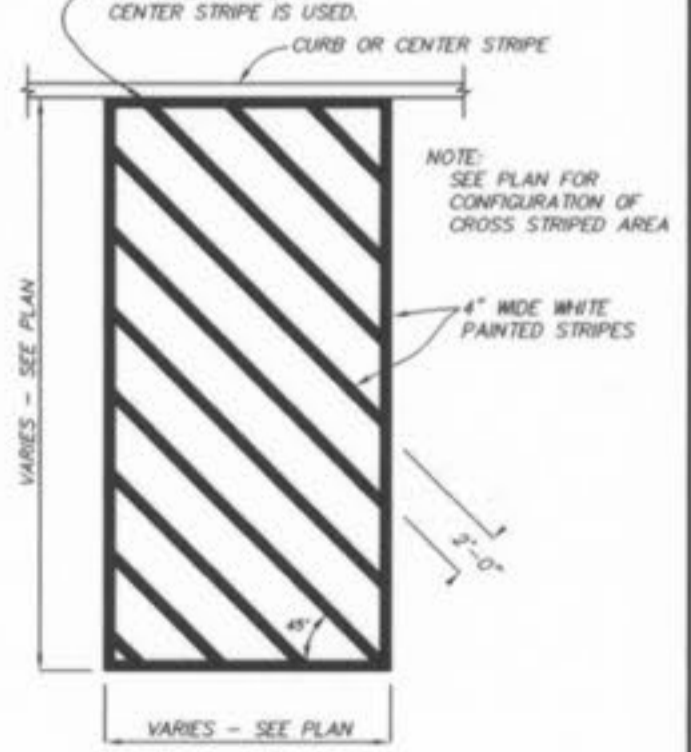
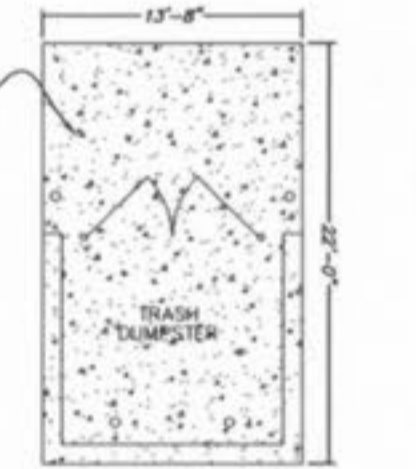
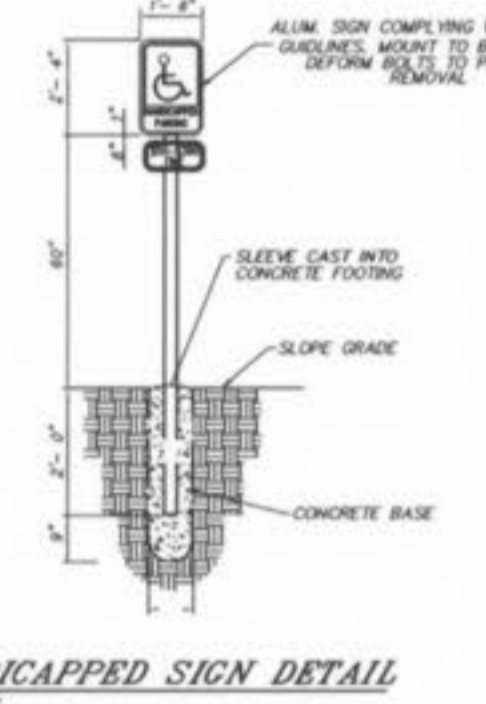
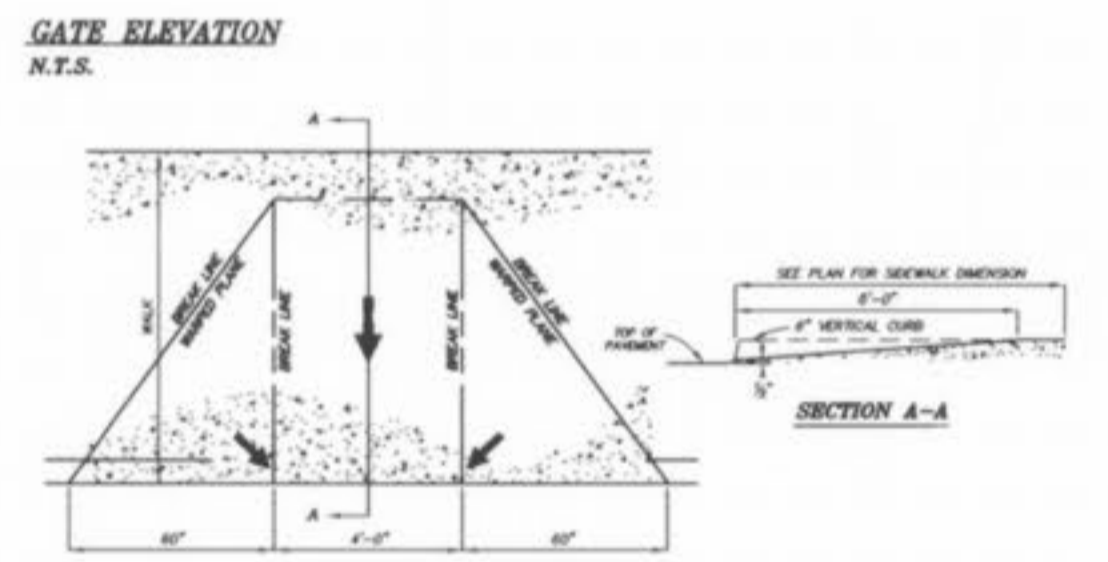
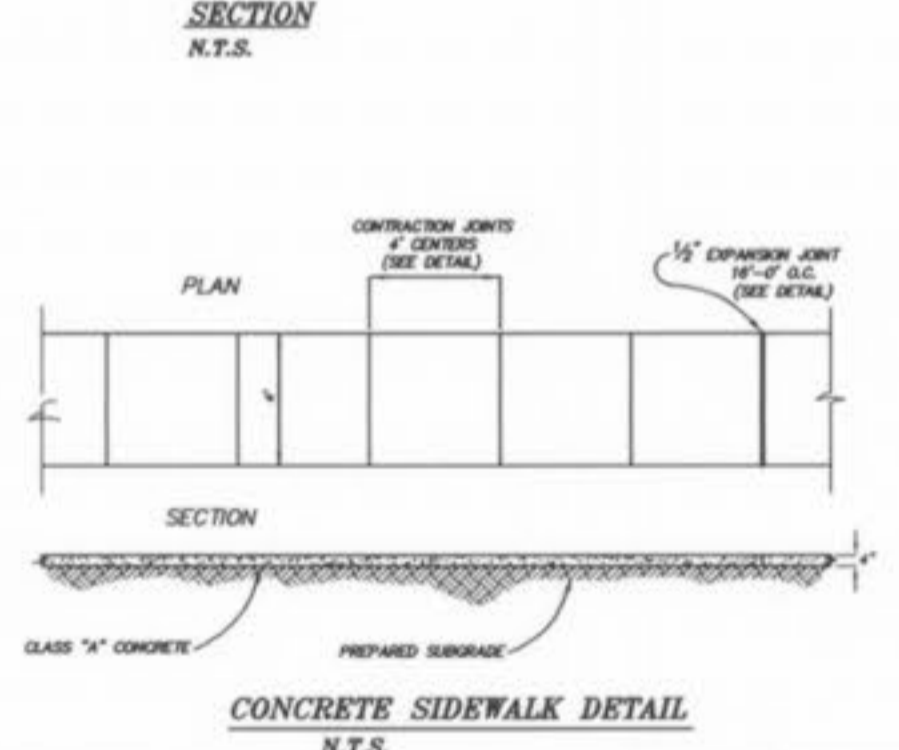
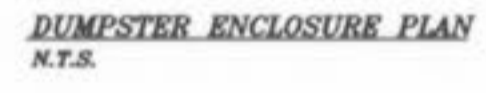
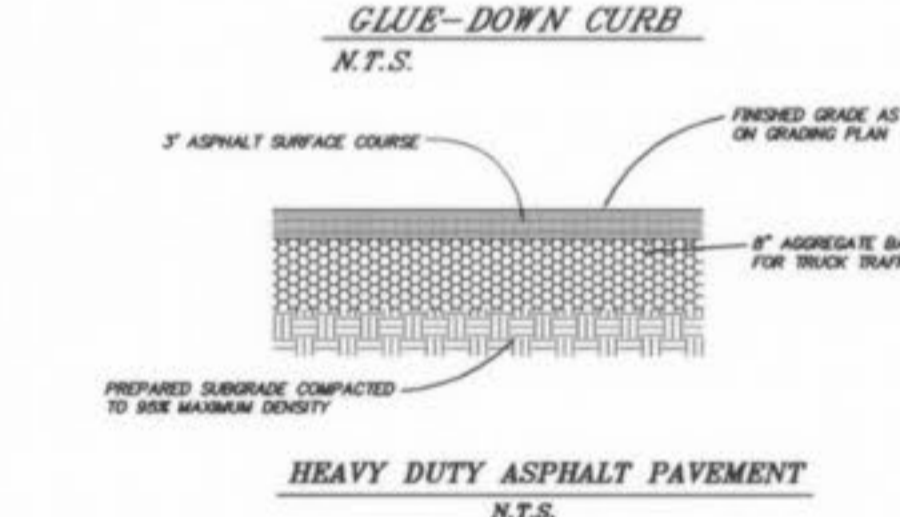
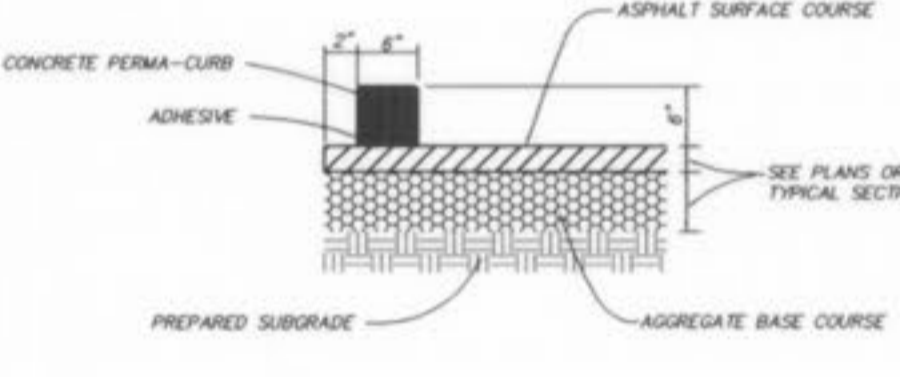
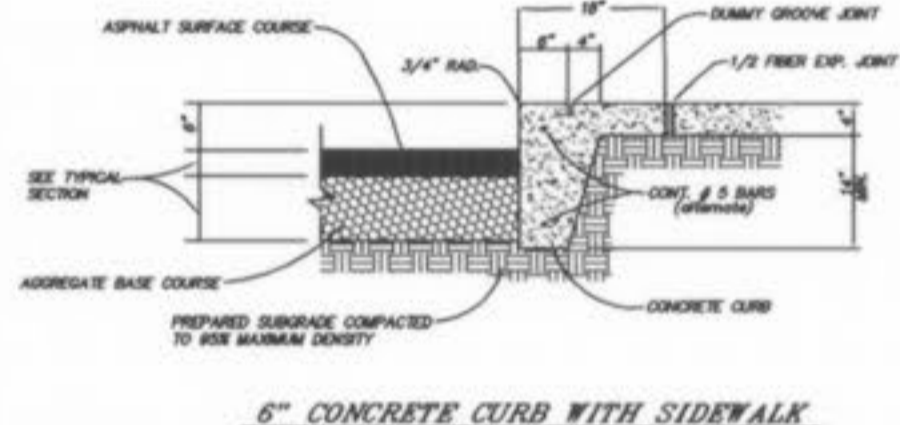
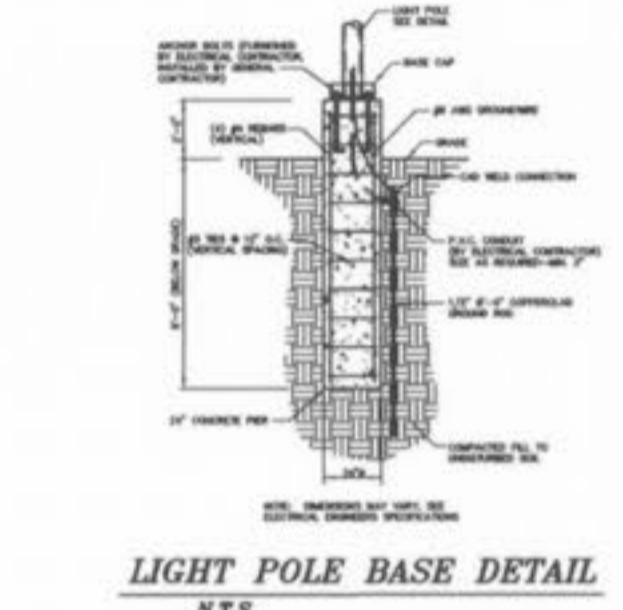
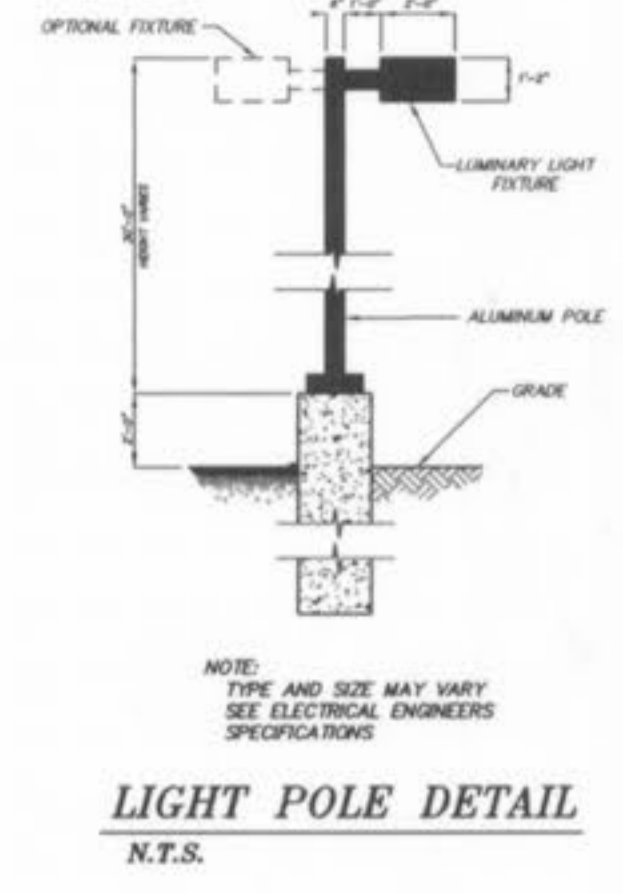
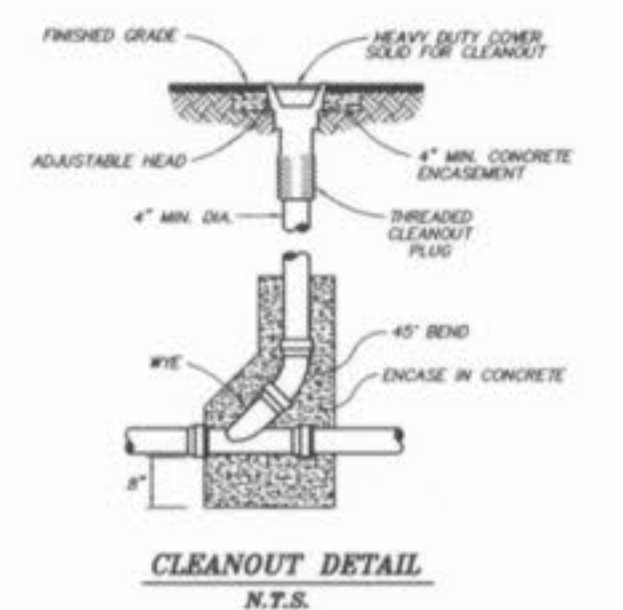
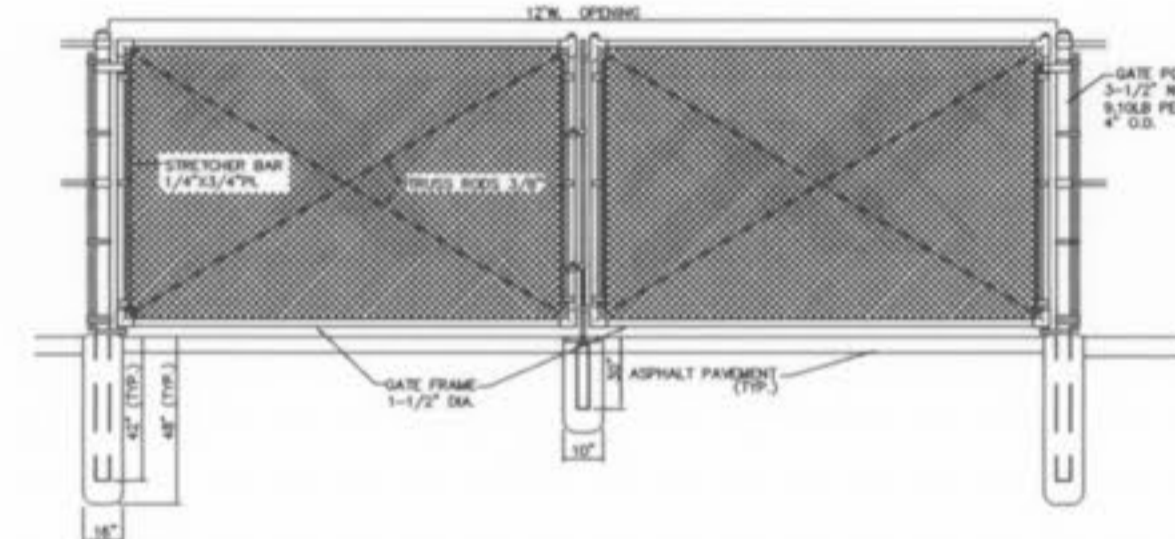
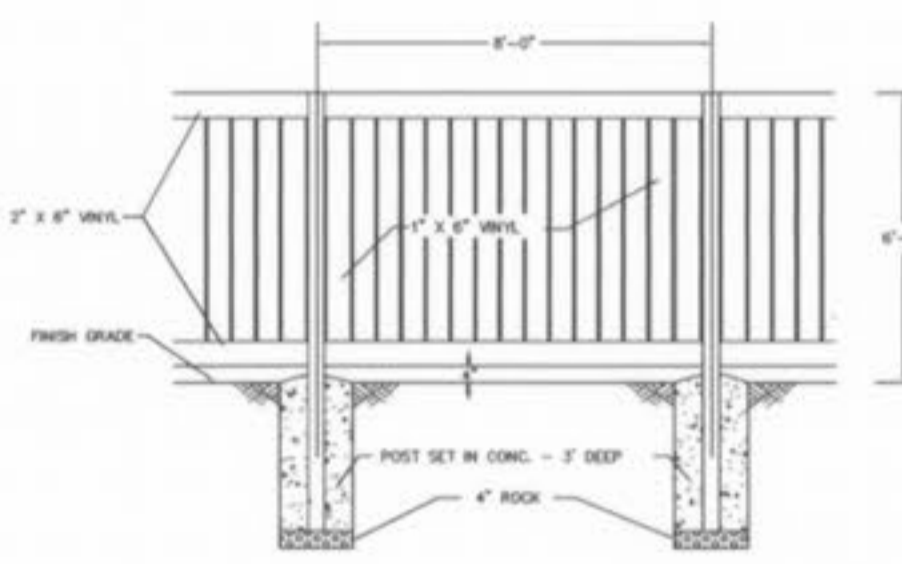
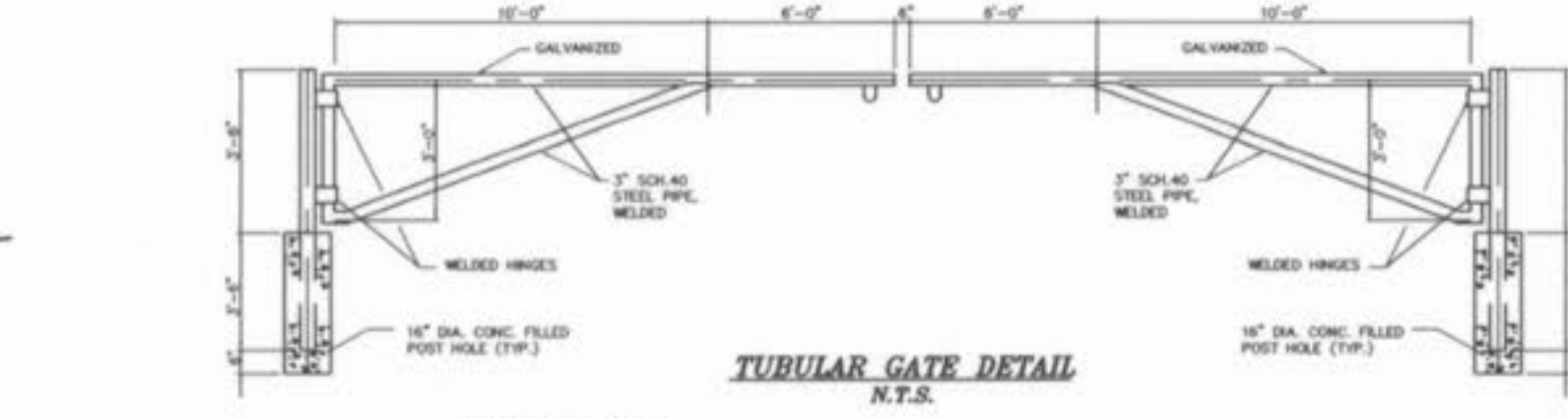
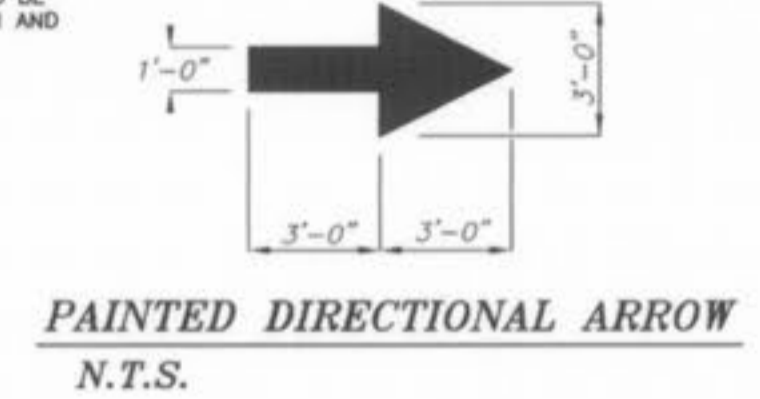
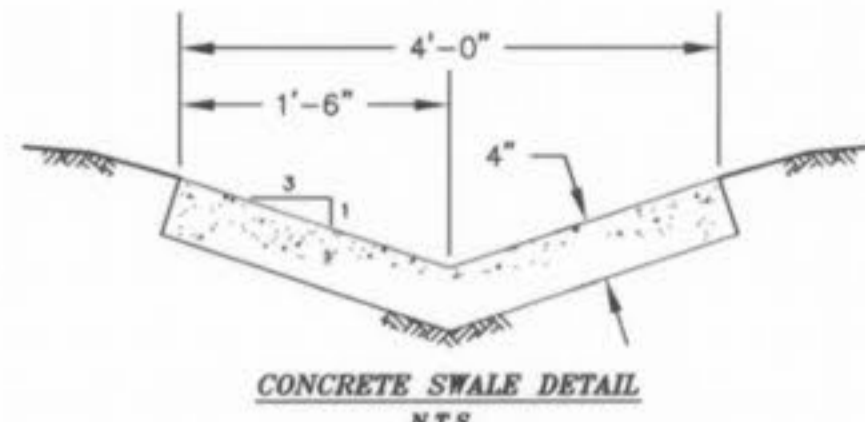
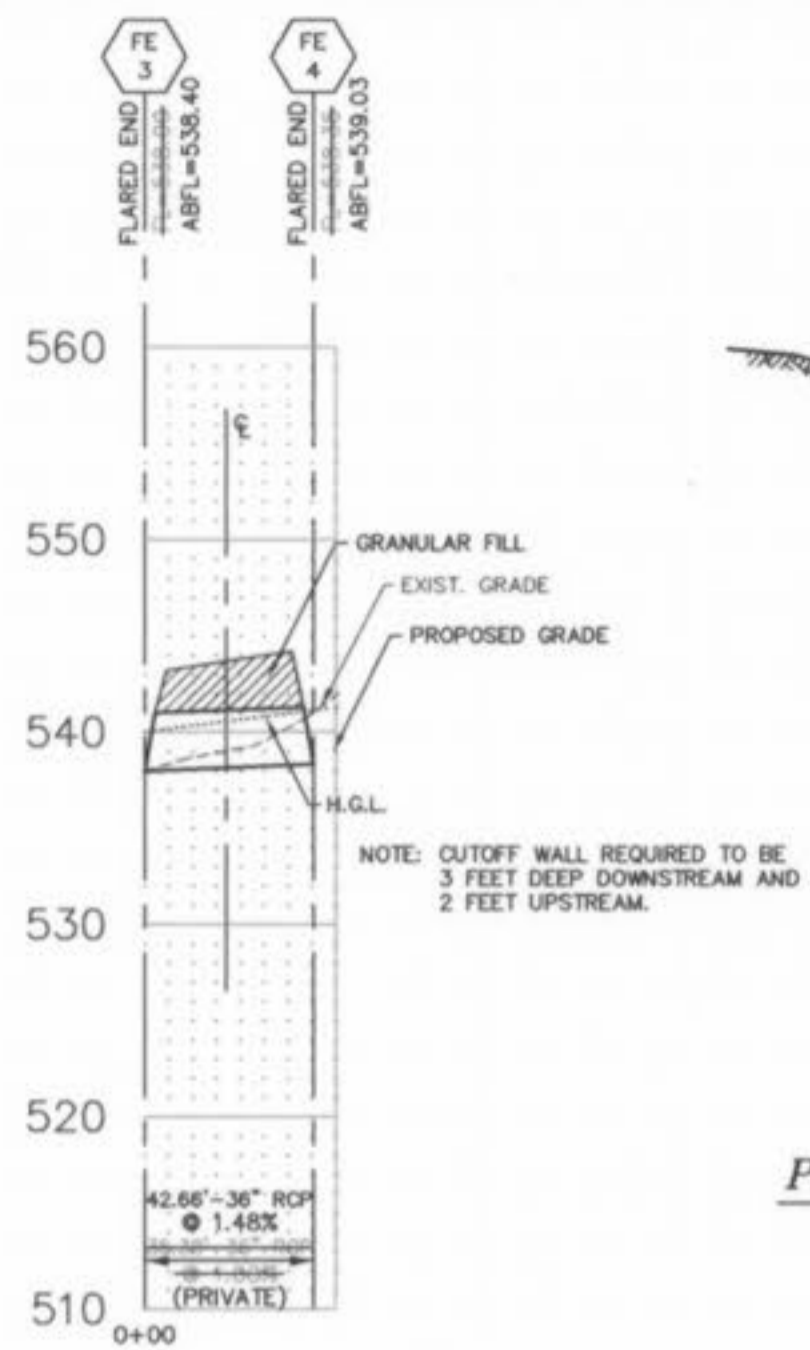
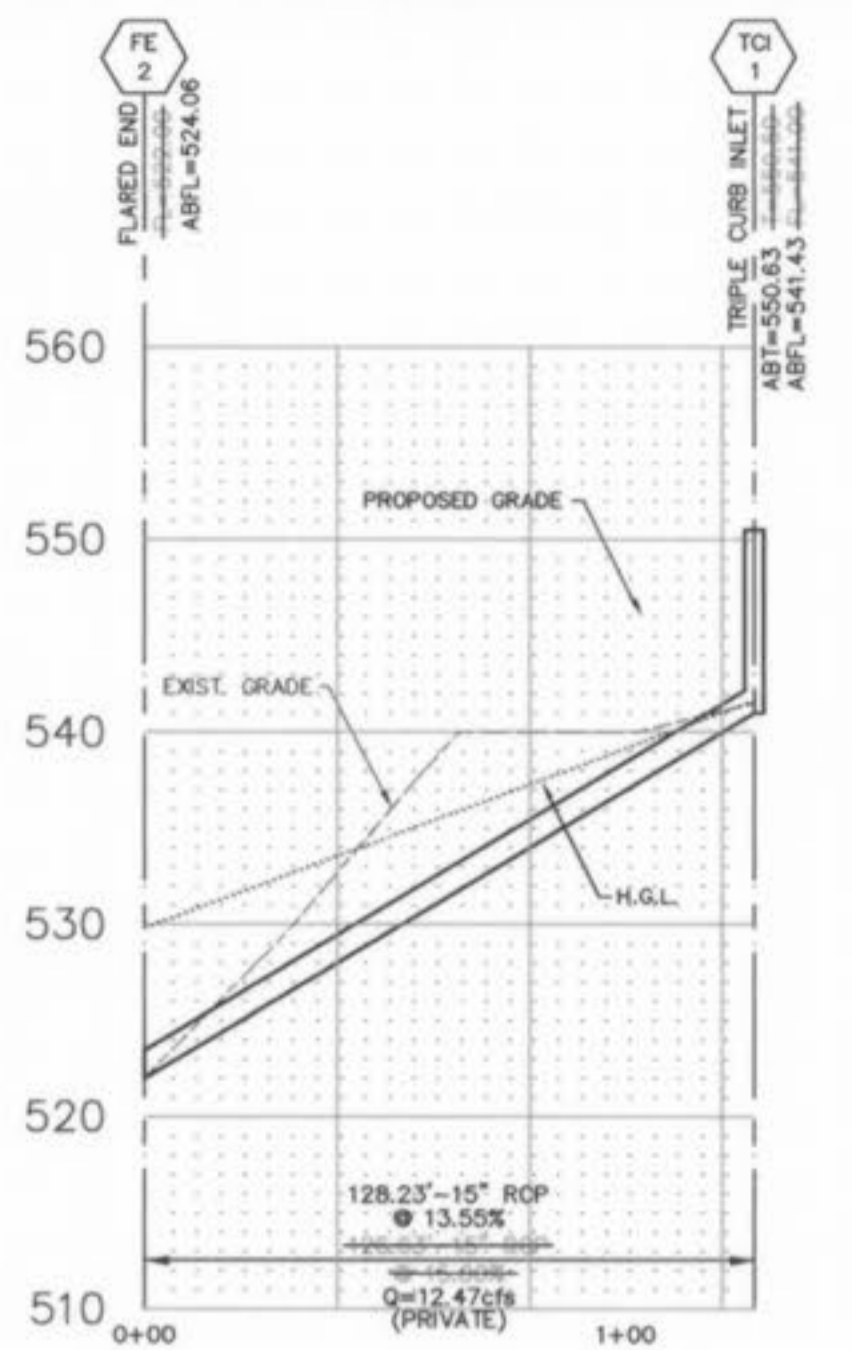
DEVELOPER/OWNER:
 Dri-Port Marine
 Greg Maze
 1500 S. Outer Rd.
 Eureka, MO 63025
 (636) 938-4970

TBM 1: Top railroad rail near the northwest corner of this site
 ELEVATION = 504.35

TBM 2: Top Iron Pipe with Box cap at the southeast corner of this site.
 ELEVATION = 565.65

BENCHMARKS ON USGS DATAM





SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

AS-BUILT 01/12/04

PICKETT RAY & SILVER
 CIVIL ENGINEERS
 PLANNERS
 LAND SURVEYORS
 333 Mid Rivers Mall Drive
 St. Peters, MO 63376
 Phone (636) 397-1211
 Fax (636) 397-1104

DRI-PORT MARINE
 DETAIL & PROFILE SHEET
 OF FALLON, MISSOURI
 Prepared For:
MR. GREG MAZE
 1400 S. OUTER ROAD
 EUREKA, MO. 63025
 (636) 938-4970

NO.	DATE	PER CITY'S COMMENTS
1	06.19.02	PER CITY'S COMMENTS
2	08.23.02	PER CITY'S COMMENTS
3	10.09.02	PER CITY'S COMMENTS
4	10.17.02	PER CITY'S COMMENTS
	01.12.04	AS-BUILT

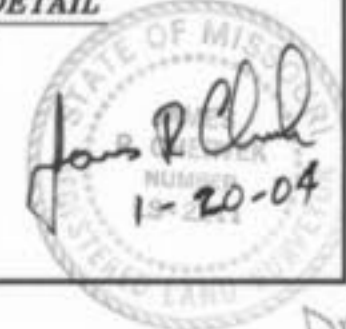
ENGINEERS AUTHENTICATION
 The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature, and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in this project and specifically excludes revisions after this date unless reauthenticated.
PICKETT, RAY & SILVER, INC

DRAWN J.M.W.	DATE 02.25.02
CHECKED D.W.B.	DATE 02.25.02
PROJECT # 00214.DRP0.02C	TASK # 1 FIELD BOOK

DRI-PORT MARINE
 DETAIL & PROFILE SHEET
 SHEET 8 OF 10
 © Copyright 2002 by Pickett, Ray & Silver Inc.

PROJECTS\00214\ASBUILT.DWG 01-12-04

CITY FILE # 19900



Dri-Port Marine As-Built